

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8



IN THE MATTER OF: )	ADMINISTRATIVE SETTLEMENT AGREEMENT AND
Barker-Hughesville Superfund Site )	ORDER ON CONSENT FOR REMOVAL
Cascade and Judith Basin Counties )	ACTION
Montana )	
)	
The Doe Run Resources Corporation)	CERCLA Docket No. cercla-08-2008-0007
Respondent.	
)	P. I. II I G ( 104 106( ) 107
· ·	Proceeding Under Sections 104, 106(a), 107

Proceeding Under Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622

ADMINISTRATIVE ORDER ON CONSENT

FOR ENGINEERING EVALUATION/COST ANALYSIS

#### I. JURISDICTION AND GENERAL PROVISIONS

- 1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and The Doe Run Resources Corporation ("Respondent"). This Settlement Agreement provides for the performance by Respondent of an Engineering Evaluation/Cost Analysis ("EE/CA") pursuant to 40 C.F.R. §300.415 of the National Oil and Hazardous Substance Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"), at the Barker-Hughesville Superfund Site (the "Site") generally located near the town of Monarch in Cascade and Judith Basin Counties, Montana.
- 2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§9604, 9606(a), 9607 and 9622, as amended ("CERCLA").
- 3. EPA has notified the Montana Department of Environmental Quality Montana (the "MDEQ") of this action.
- 4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of facts, conclusions of law, and determinations in Sections IV and V of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms.

#### II. PARTIES BOUND

- 5. This Settlement Agreement applies to and is binding upon EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter the Respondent's responsibilities under this Settlement Agreement.
- 6. Respondent is liable for carrying out all activities required by this Settlement Agreement
- 7. Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement.

#### III. DEFINITIONS

- 8. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement, which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:
- a. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C.§§ 9601, et seq.
- b. "Day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day. "Working Day" shall mean a day other than a Saturday, Sunday, or Federal holiday.
- c. "Engineering Evaluation/Cost Analysis or EE/CA" shall mean an engineering evaluation/cost analysis of removal alternatives prepared in accordance with EPA's Guidance on Conducting Non-Time Critical Removal Actions Under CERCLA, OSWER Directive No. 9360.0-32, August 1993.
- d. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXXI.
- e. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.
- f. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Paragraph 27 and Paragraph 37 (emergency response).
- g. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.
- h. "MDEQ" shall mean the Montana Department of Environmental Quality and any successor departments or agencies of the MDEQ.

- i. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C.§ 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.
- j. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.
  - k. "Parties" shall mean EPA and Respondent.
- 1 "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, et seq. (also known as the Resource Conservation and Recovery Act).
- m. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.
- n. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXX). In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.
- o. "Site" shall mean the Barker-Hughesville Superfund Site, which encompasses approximately 15 square miles, located in the Little Belt Mountains near the town of Monarch in Cascade and Judith Basin Counties, Montana, depicted generally on the map attached as Appendix A.
  - p. "State" shall mean the State of Montana.
- q. "Statement of Work" or "SOW" shall mean the statement of work for the preparation of an EE/CA, as set forth in Appendix B to this Settlement Agreement, and any modifications made thereto in accordance with this Settlement Agreement.
- r. "Waste Material" shall mean 1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. §9601(14); 2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C.§ 9601(33); 3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C.§ 6903(27); and 4) any "hazardous waste" under State law.
- s. "Work" shall mean all activities Respondent is required to perform under this Settlement Agreement.

#### IV. FINDINGS OF FACT

9. The Barker-Hughesville Site (Site) is located in west-central Montana east of the town of Monarch, within the very western portion of Judith Basin County and adjacent Cascade County. The Site is located in the Little Belt Mountains mostly within the Dry Fork Belt Creek Watershed and encompasses approximately fifteen (15) square miles. The Site is a portion of the

Barker-Hughesville Superfund Site, which was listed on the National Priorities List ("NPL") on September 13, 2001.

- 10. The Site is the location of historic mining operations with approximately 45 known abandoned mine sites and associated waste rock dumps and approximately 16 known discharging mine adits. The historic mining operations resulted in deposits of waste rock, mill tailings and uncontrolled acid mine drainage from mine workings in the Dry Fork Belt Creek watershed.
- 11. The Upper Galena Creek drainage is located in the center of the Site, downstream from the Green Creek and Daisy Creek drainages. It includes the area from the Block P Mine downstream through the Barker town site. The Upper Galena Creek drainage is dominated by the Block P Mine. Galena Creek is one of the most heavily impacted tributaries to the Dry Fork Belt Creek within the Site.
- 12. Hazardous substances present in the mine waste rock and acid mine drainage at the Site include arsenic, copper, cadmium, lead and zinc, which are being released into the environment. Sampling showed concentrations of lead and arsenic at several times those levels considered safe for human exposure (ie. Belt Patent Mine 3520 ppm arsenic, Edwards Mine 24,900 ppm lead). Water quality sampling in Galena Creek showed metals present at levels above aquatic life standards and/or maximum contaminant levels for drinking water.
- 13. In approximately March 1927, the St. Joseph Lead Company purchased the Barker (Block P) Mine, the Wright Mine, the Edwards Mine, the Grey Eagle Mine and the Belt Patent Mine and operated those mines during several periods until 1944 when they were sold. These mines are all located in the Upper Galena Creek drainage portion of the Site.
  - 14. The Respondent is a successor company to the St. Joseph Lead Company.

#### V. CONCLUSIONS OF LAW AND DETERMINATIONS

- 15. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:
- a. The Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C.  $\S$  9601(9).
- b. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substance(s)" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- c. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. §9601(21).
- d. Respondent is a successor to an "owner" and/or "operator" of portions of the facility at the time of disposal of hazardous substances at the Site, as defined by Section 101(20)

of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2) and is therefore a liable party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

- e. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C.§ 9601(22).
- f. The removal action required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

#### VI. SETTLEMENT AGREEMENT AND ORDER

Based on the foregoing Findings of Fact, Conclusions of Law, Determinations, and the Administrative Record for this Site, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all attachments to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

## VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SCENE COORDINATOR

- 16. Respondent shall retain one or more contractors to perform the Work and shall notify EPA of the name(s) and qualifications of such contractor(s) within thirty (30) days of the Effective Date. Respondent shall also notify EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least ten (10) working days prior to commencement of such Work. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondent. If EPA disapproves of a selected contractor, Respondent shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within ten (10) working days of EPA's disapproval. The proposed contractor must demonstrate compliance with ANSI/ASQC E-4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP") or the equivalent.
- 17. Within fourteen (14) days after the Effective Date, Respondent shall designate a Project Coordinator who shall be responsible for administration of all actions by Respondent required by this Settlement Agreement and shall submit to EPA the designated Project Coordinator's name, address, telephone number, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within ten

- (10) working days following EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondent.
- 18. EPA has designated Steve Way of the Region 8, Site Assessment and Emergency Response Program, as its On-Scene Coordinator ("OSC"). Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to the OSC at U.S. Environmental Protection Agency, Region 8, MC 8EPR-SA, 1595 Wynkoop Street, Denver, CO 80202-1129. Submissions and notices to be given to MDEQ shall be directed to Keith Large, MDEQ Project Officer, P.O. Box 200901, Helena, MT 59620-0901 or, for overnight mail, to 1100 N. Last Chance Gulch, Helena, MT 59601.
- 19. EPA and Respondent shall have the right, subject to Paragraph 17, to change their respective designated OSC or Project Coordinator. Respondent shall notify EPA ten (10) working days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice.

#### VIII. WORK TO BE PERFORMED

20. Respondent shall perform, at a minimum, all actions necessary to implement the Statement of Work, attached hereto as Appendix B, and shall submit to EPA and MDEQ a final EE/CA. The actions to be implemented generally include, but are not limited to, the following:

Sampling and other data collection Data compilation and analysis Alternatives Analysis Report Preparation

- 21. Work Plan and Implementation.
- a. Within sixty (60) days after the Effective Date, Respondent shall submit to EPA for approval a draft Work Plan for performing the EE/CA generally described in Paragraph 20 above and a Quality Assurance Project Plan ("QAPP") as part of the Work Plan. The QAPP should be prepared in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001), and "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February 1998).
- b. EPA may approve, disapprove, require revisions to, or modify the Work Plan in whole or in part provided that any revisions or modifications are consistent with achieving the objectives set forth in the SOW. If EPA requires revisions, Respondent shall submit a revised draft Work Plan within fourteen (14) days of receipt of EPA's notification of the required revisions. Respondent shall implement the Work Plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement Agreement.

- c. Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement. Respondent shall not commence implementation of the Work Plan developed hereunder until receiving written EPA approval pursuant to Paragraph 21(b). Respondent may commence, prior to the execution of this Settlement Agreement, some of the activities required by the Work, provided that EPA has given its approval either in writing or orally.
- 22. Health and Safety Plan. Within sixty (60) days after the Effective Date, Respondent shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-Site work under this Settlement Agreement. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning. Respondent shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the pendency of the removal action.

#### 23. Quality Assurance and Sampling.

- a. Within sixty (60) days after the Effective Date, Respondent shall submit to EPA for approval a draft Sampling and Analysis Plan. All sampling and analyses performed pursuant to this Settlement Agreement shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondent shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Respondent shall follow, as appropriate, "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures" (OSWER Directive No. 9360.4-01, April 1, 1990), as guidance for QA/QC and sampling. Respondent shall only use laboratories that have a documented Quality System that complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), and "EPA Requirements for Quality Management Plans (QA/R-2) (EPA/240/B-01/002, March 2001)," or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP") as meeting the Quality System requirements.
- b. Upon request by EPA, Respondent shall have such a laboratory analyze samples submitted by EPA for QA monitoring. Respondent shall provide to EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.
- c. Upon request by EPA, Respondent shall allow EPA or MDEQ or their authorized representatives to take split and/or duplicate samples. Respondent shall notify EPA and MDEQ not less than five (5) days in advance of any sample collection activity, unless shorter notice is agreed to by EPA. EPA and MDEQ shall have the right to take any additional samples

that they deem necessary. Upon request, EPA and MDEQ shall allow Respondent to take split or duplicate samples of any samples either takes as part of its oversight of Respondent's implementation of the Work.

#### 24. Reporting.

- a. Respondent shall submit written progress reports to EPA and MDEQ containing the information and according to the schedule set forth in Section VI. of the Statement Of Work.
- b. Respondent shall submit four (4) copies to EPA and two (2) copies to MDEQ of all plans, reports or other submissions required by this Settlement Agreement, the Statement of Work, or any approved work plan. Upon request by EPA, Respondent shall submit such documents in electronic form.
- 25. Final Report. Within thirty (30) days after completion of all Work required by this Settlement Agreement, Respondent shall submit for EPA review and approval and MDEQ review, a final report summarizing the actions taken to comply with this Settlement Agreement. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports." The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Settlement Agreement, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

"Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

#### IX. SITE ACCESS

- 26. If the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by the Respondent, the Respondent shall, commencing on the Effective Date, provide EPA, the MDEQ, and their representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.
- 27. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use is best efforts to obtain all necessary access agreements in a timely manner, or as otherwise specified in writing by the OSC. Respondent shall immediately notify EPA if after using its best efforts it was unable to

obtain such agreements. EPA may then assist Respondent in gaining access, to the extent necessary to effectuate the response actions described in this Settlement Agreement, using such means as EPA deems appropriate. Respondent shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XV (Payment of Response Costs).

28. Notwithstanding any provision of this Settlement Agreement, EPA and the MDEQ retain all of their access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

#### X. ACCESS TO INFORMATION

- 29. Respondent shall provide to EPA and the MDEQ, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to EPA and the MDEQ, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.
- 30. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA and the MDEQ under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. §2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA and the MDEQ, or if EPA has notified Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent.
- 31. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Respondent asserts such a privilege in lieu of providing documents, they shall provide EPA and the MDEQ with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.
- 32. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or

engineering data, or any other documents or information evidencing conditions at or around the Site.

#### XI. RECORD RETENTION

- 33. Until ten (10) years after Respondent's receipt of EPA's notification pursuant to Section XXIX (Notice of Completion of Work), Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until ten (10) years after Respondent's receipt of EPA's notification pursuant to Section XXIX (Notice of Completion of Work), Respondent shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.
- 34. At the conclusion of this document retention period, Respondent shall notify EPA and the MDEQ at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA or the MDEQ, Respondent shall deliver any such records or documents to EPA or the MDEQ. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, they shall provide EPA or the MDEQ with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.
- 35. Respondent hereby certifies that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the MDEQ or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

#### XII. COMPLIANCE WITH OTHER LAWS

36. Respondent shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable State and federal laws and regulations except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 6921(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-Site actions required pursuant to this Settlement Agreement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs")

under federal environmental or State environmental or facility siting laws. Respondent shall incorporate ARARs in the Work Plan as identified by EPA after consultation with MDEQ.

#### XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

- 37. In the event of any action or occurrence during performance of the Work other than an act of God as defined in CERCLA, which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the OSC or, in the event of his unavailability, the Regional Duty Officer Region 8, Emergency Response Unit, at (303)293-1788 of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XV (Payment of Response Costs).
- 38. In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify the OSC at (303)293-1788 and the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA and MDEQ within seven (7) days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, et seq.

#### XIV. AUTHORITY OF ON-SCENE COORDINATOR

39. The OSC shall be responsible for overseeing Respondent's implementation of this Settlement Agreement. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement Agreement, or to direct any other removal action undertaken at the Site.

#### XV. PAYMENT OF RESPONSE COSTS

- 40. Payments for Future Response Costs.
- a. Respondent shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondent a bill requiring payment that includes the standard Regionally-prepared cost summary, which includes direct and indirect costs incurred by EPA and its contractors. Respondent shall make all payments within 30 days of receipt of each

bill requiring payment, except as otherwise provided in Paragraph 42 of this Settlement Agreement.

b. Respondent shall make all payments required by this Paragraph by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party making payment and EPA Site/Spill ID number 08-5N. Respondent shall send the check(s) to:

#### Regular Mail:

U.S. Environmental Protection Agency Superfund Payments Cincinnati Finance Center PO Box 979076 St. Louis, MO 63197-9000

#### Express Mail:

U.S. Bank Government Lockbox 979076 US EPA Superfund Payments 1005 Convention Plaza SL-MO-C2-GL St. Louis, MO 63101

For wire transfer, payment must be sent directly to the Federal Reserve Bank in New York City with the following information:

Federal Reserve Bank of New York ABA: 021030004 Account Number: 68010727

c. At the time of payment, Respondent shall send notice that payment has been made by email to acctsreceivable.cinwd@epa.gov, and to:

Dana Anderson, NWD EPA Cincinnati Finance Office 26 Martin Luther King Drive Cincinnati, Ohio 45268

John Works
U.S. EPA, Region 8 (ENF-RC)
1595 Wynkoop Street
Denver, CO 80202-1129

- d. The total amount to be paid by Respondent pursuant to Paragraph 40(a) shall be deposited by EPA in the Barker-Hughesville Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.
- 41. In the event that the payment for Future Response Costs is not made within thirty (30) days of Respondent's receipt of a bill, Respondent shall pay Interest on the unpaid balance. The Interest on Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XVIII.
- 42. Respondent may contest payment of any Future Response Costs billed under Paragraph 40 if it determines that EPA has made a mathematical error, or if it believes EPA incurred excess costs as a direct result of an EPA action that was inconsistent with the NCP. Such objection shall be made in writing within thirty (30) days of receipt of the bill and must be sent to the OSC. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondent shall within the 30day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 40. Simultaneously, Respondent shall establish an interest-bearing escrow account in a federally-insured bank and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the EPA OSC a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondent shall initiate the Dispute Resolution procedures in Section XVI (Dispute Resolution). If EPA prevails in the dispute. within five (5) days of the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 40. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to EPA in the manner described in Paragraph 40. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVI (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

#### XVI. DISPUTE RESOLUTION

43. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

- 44. If Respondent objects to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, it shall notify EPA in writing of its objection(s) within ten (10) days of such action, unless the objection(s) has/have been resolved informally. EPA and Respondent shall have twenty (20) days from EPA's receipt of Respondent's written objection(s) to resolve the dispute through formal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA.
- 45. Any agreement reached by the parties pursuant to this Section shall be in writing and shall, upon signature by both parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period on disputes concerning penalties or cost recovery, the Assistant Regional Administrator for the Office of Enforcement will issue a written decision on the dispute to Respondent. If the Parties are unable to reach an agreement within the Negotiation Period on any other dispute, the Assistant Regional Administrator for the Office of Ecosystems Protection and Remediation will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondent's obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

#### XVII. FORCE MAJEURE

- 46. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a force majeure. For purposes of this Settlement Agreement, a force majeure is defined as any event arising from causes beyond the control of Respondent, or of any entity controlled by Respondent, including but not limited to their contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the Work or increased cost of performance.
- 47. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a force majeure event, Respondent shall notify EPA orally within three (3) days of when Respondent first knew that the event might cause a delay. Within five (5) days thereafter, Respondent shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a force majeure event if they intend to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of force majeure for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

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48. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Settlement Agreement that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

#### XVIII. STIPULATED PENALTIES

- 49. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 50 and 51 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVII (Force Majeure). "Compliance" by Respondent shall include completion of the activities under this Settlement Agreement or any work plan or other plan approved under this Settlement Agreement identified below in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.
  - 50. Stipulated Penalty Amounts Work.
- a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 50(b):

Penalty Per Violation Per Day	Period of Noncompliance
\$500	1st through 14th day
\$1500	15th through 30th day
\$10,000	31st day and beyond

#### b. Compliance Milestones

Submission of Draft and Final EE/CA Draft and Final Work Plan Draft and Final Sampling and Analysis Plan Draft and Final Quality Assurance Project Plan Draft and Final Project Health and Safety Plan Payment of Future Response Costs

51. Stipulated Penalty Amounts - Reports. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports or other written documents pursuant to Paragraphs 24 and 25:

Penalty Per Violation Per Day	Period of Noncompliance
\$250	1st through 14th day
\$500	15th through 30th day
\$2000	31st day and beyond

- 52. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: 1) with respect to a deficient submission under Section VIII (Work to be Performed), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and 2) with respect to a decision by the EPA Management Official by the Assistant Regional Administrator level or higher, under Paragraph 45 of Section XVI (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the Assistant Regional Administrator issues a final decision regarding such dispute. Nothing in this Settlement Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.
- 53. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Respondent written notification of the failure and describe the noncompliance. EPA may send Respondent a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondent of a violation.
- 54. All penalties accruing under this Section shall be due and payable to EPA within thirty (30) days of Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XVI (Dispute Resolution). All payments to EPA under this Section shall be made in accordance with the payment instructions set forth in Paragraph 40 above.
- 55. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.
- 56. Penalties shall continue to accrue during any dispute resolution period, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of EPA's decision.
- 57. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 54. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(l) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil

penalties pursuant to Section 106(b) or 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Section, except in the case of a willful violation of this Settlement Agreement. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

#### XIX. COVENANT NOT TO SUE BY EPA

58. In consideration of the actions that will be performed and the payments that will be made by Respondent under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Respondent of all obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XV. This covenant not to sue extends only to Respondent and does not extend to any other person.

#### XX. RESERVATIONS OF RIGHTS BY EPA

- 59. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing in this Settlement Agreement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.
- 60. The covenant not to sue set forth in Section XIX above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:
- a. claims based on a failure by Respondent to meet a requirement of this Settlement Agreement;
  - b. liability for costs not included within the definition Future Response Costs;
  - c. liability for performance of response action other than the Work;
  - d. criminal liability;

- e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
- g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

#### XXI. COVENANT NOT TO SUE BY RESPONDENT

- 61. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement Agreement, including, but not limited to:
- a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
- b. any claim arising out of response actions at or in connection with the Work, Future Response Costs, or this Settlement Agreement, including any claim under the United States Constitution, the State Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or
- c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or Future Response Costs.

These covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 60 (b), (c), and (e) - (g), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

62. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

#### XXII. RESERVATION OF RIGHTS BY RESPONDENT

- 63. Respondent reserves and nothing in this Settlement Agreement shall create any prejudice to:
- a. all rights of Respondent, including any defenses or claims against the United States, with respect to any response action or response costs other than the Work, Future Response Costs, and all matters addressed in this Settlement Agreement (as defined in paragraph 67a below); and,

b. all rights of Respondent, including any defenses or claims against the United States, related to any claim for natural resource damages.

#### XXIII. OTHER CLAIMS

- 64. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Respondent or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.
- 65. Except as expressly provided in Section XIX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.
- 66. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

#### XXIV. CONTRIBUTION

- 67. a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and that Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work and Future Response Costs.
- b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which Respondent has, as of the Effective Date, resolved its liability to the United States for the Work and Future Response Costs.
- c. Nothing in this Settlement Agreement precludes the United States or Respondent from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any persons not parties to this Settlement Agreement. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

#### XXV. INDEMNIFICATION

- 68. Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.
- 69. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.
- 70. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

#### XXVI. INSURANCE

71. At least five (5) days prior to commencing any on-Site work under this Settlement Agreement, Respondent shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of one (1) million dollars, combined single limit, naming EPA as an additional insured. Upon written request by EPA, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. In addition, for the duration of the Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent needs to provide

only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

#### XXVII. FINANCIAL ASSURANCE

- 72. Within thirty (30) days of the Effective Date, Respondent shall establish and maintain financial security for the benefit of EPA in the amount of Four Hundred Thousand Dollars (\$400,000) in one or more of the following forms, in order to secure the full and final completion of Work by Respondent:
- a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;
- b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA;
  - c. a trust fund administered by a trustee acceptable in all respects to EPA;
- d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work;
- e. a written guarantee to pay for or perform the Work provided by one or more parent companies of Respondent, or by one or more unrelated companies that have a substantial business relationship with Respondent; including a demonstration that any such guarantor company satisfies the financial test requirements of 40 C.F.R. Part 264.143(f); and/or,
- f. a demonstration of sufficient financial resources to pay for the Work made by the Respondent, which shall consist of a demonstration that Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).
- 73. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Respondent shall, within thirty (30) days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 72, above. In addition, if at any time EPA notifies Respondent that the anticipated cost of completing the Work has increased, then, within thirty (30) days of such notification, Respondent shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondent's inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.
- 74. If Respondent seeks to ensure completion of the Work through a guarantee pursuant to Subparagraph 72(e) or 72(f) of this Settlement Agreement, Respondent shall (i) demonstrate to

EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f); and (ii) resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the Effective Date or such other date as agreed by EPA, to EPA.

- 75. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 72 of this Section, Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution). Respondent may reduce the amount of security in accordance with EPA's written decision resolving the dispute.
- 76. Respondent may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondent may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

#### XXVIII. MODIFICATIONS

- 77. The OSC may make modifications to any plan or schedule or Statement of Work in writing or by oral direction provided that the Respondent's Project Coordinator concurs with the modification. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of the OSC's oral direction. Any other requirements of this Settlement Agreement may be modified in writing by mutual agreement of the parties. Respondent will provide a copy of any EPA approved modifications to MDEO.
- 78. If Respondent seeks permission to deviate from any approved work plan or schedule or Statement of Work, Respondent's Project Coordinator shall submit a written request to EPA for approval, with a copy to MDEQ, outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to Paragraph 77.
- 79. No informal advice, guidance, suggestion, or comment by the OSC or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

#### XXIX. NOTICE OF COMPLETION OF WORK

79. When EPA determines, after EPA's review of the Final Report, that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including payment of Future Response Costs and record retention, EPA will provide written notice to Respondent. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Work Plan if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

#### XXX. INTEGRATION/APPENDICES

80. This Settlement Agreement and its appendices constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following Appendices A and B are attached to and incorporated into this Settlement Agreement: the Site Map; and, the SOW.

#### XXXI. EFFECTIVE DATE

81. This Settlement Agreement shall be effective when it is signed by the Regional Administrator or his/her delegate.

The undersigned representative of Respondent certifies that he/she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the Respondent to this document.

Agreed this	10th	day of	Ju	١٧	, 2008.

THE DOE RUN RESOURCES CORPORATION

By:	Low (	Mancheau	Date:	10	JUL	08
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	Its: VICE	PRESIDENT LAW				

It is so ORDERED and Agreed this 215t day of July, 2008.

## U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 8

Ву:	Vene A	OX-
	David Ostrander	

Director, Preparedness, Assessment and Emergency Response Program Office of Ecosystems Protection and Remediation

Sharon I Kerche Date: 1/17/08

Director, Technical Enforcement Program
Office of Enforcement, Compliance
and Environmental Justice

By: Matthew Cohn Date: 7/17/08

Supervisory Attorney, Legal Enforcement Program Office of Enforcement, Compliance and Environmental Justice

### **APPENDIX A**

## APPENDIX B

#### Attachment

# Statement of Work Engineering Evaluation/Cost Analysis Block P Mine & Related Mines Barker Hughesville Mining District Site Monarch, Montana

#### I. Background

The Barker-Hughesville Mining District Site (Site) is located in west-central Montana, in the Little Belt Mountains, east of the town of Monarch. The historic mining operations resulted in deposits of waste rock, mill tailings and uncontrolled acid mine drainage from mine workings in the Dry Fork Belt Creek watershed. Galena Creek is one of the most heavily impacted tributary to the Dry Fork of Belt within the Site. Hazardous substance present in the waste and acid mine drainage include arsenic, copper, cadmium, lead and zinc are being released into the environment. Water quality sampling in Galena Creek shows that these metals are present at levels above aquatic life standards and/or maximum contaminant levels for drinking water, and pH levels were found present between 2.8 and 3.8 standard units in locations near the Block P Mine complex.

There have been numerous assessments and investigations performed in the watershed since 1990. A partial list includes:

- MSE, Inc., 1991. Environmental Assessment for Block P Project Site, Hüghesville Mining District. Prepared for Montana Department of State Lands, February 15, 1991.
- Chen-Northern, Inc., 1991. Hughesville/Barker Mining District, Galena Creek Drainage Preliminary Assessment Project Report. Prepared for Montana Department of State Lands, March 1991.
- United States Department of Agriculture, Forest Service, Region 1, 1991. Preliminary Assessment, Lewis and Clark National Forest, Potential Hazardous Waste Site at Barker/Hughesville Mining District, Hughesville, Montana. March 1991.
- Pioneer Technical Services, Inc., 1993. Hazardous Materials Inventory Site Investigation Log Sheet Block P Tailings. Prepared for Montana Department of State Lands. June 7, 1993.

 Pioneer Technical Services, Inc., 1995. Site History Report for the Barker/Hughesville Mining District Site, Monarch, Montana. Prepared for Montana Department of Health and Environmental Sciences and EPA. June, 1995.

The Respondent has conducted surface water quality monitoring of Galena Creek and Dry Fork Belt Creek since 1996. The data generated by these monitoring efforts have been summarized in several reports, including, but not limited to:

- Revised Water Quality Assessment Report for the Block P Mining Area (prepared for the Respondent by Barr Engineering Company and submitted to USDA-FS in July 1998).
- Final Engineering Evaluation / Cost Analysis, Block P Mill Tailings Site (prepared for the Respondent by Barr Engineering and submitted to USDA-FS in June 2001).
- Annual Monitoring Report, Block P Mill Tailings Site (prepared for the Respondent by Barr Engineering and to be submitted to USDA-FS in December 2007).

In April 2000, the Respondent prepared a document entitled "Revised Sampling and Analysis Plan for Surface Water and Groundwater – 2000 Sampling" for the Block P mine site and surrounding areas. This document was prepared under Montana DEQ oversight and the sampling described therein was conducted during the 2000 field season. The majority of the data generated by this sampling effort were provided to USDA-FS as part of the Block P Mill Tailings Site EE/CA referenced above.

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The current scope of this Engineering Evaluation/Cost Analysis (EE/CA) includes several mines in the Galena Creek basin including the Block P Mine, Grey Eagle Mine, Edwards Mine, Wright Mine, and the Belt Patent Mine. The Respondent shall prepare an EE/CA, following EPA guidance, for submittal to EPA and subject to EPA approval. The EE/CA will be based on the investigations to be performed as described in this Statement of Work, and it will evaluate Removal Action alternatives designed to mitigate the releases from the Block P Mine complex.

#### III. Areal Extent of the EE/CA

The Block P Mine complex for purposes of this SOW is defined to include the following specific mining properties, associated impacted land and land in the immediate vicinity:

Barker (Block P) Mine: The Barker (Block P) mine consists of a large waste rock pile (frequently referred to as the Block P mine dump), mining-era buildings and related structures, and an uncontrolled mine adit (the Block P mine adit). These features are located along the west side of the upper end of Galena Creek. The Block P mine adit periodically discharges to Galena Creek via overland flow. The volume of the waste rock pile has previously been estimated to be between 185,000 – 250,000 cubic yards.

Grey Eagle Mine: The Grey Eagle mine consists of an uncontrolled mine adit (the Grey Eagle adit) located on the east side of the Galena Creek valley, approximately across the valley from the Barker (Block P) mine adit. The Grey Eagle adit maintain a nearly continuous base flow, but depending on the actual flow rate, the adit discharge flows parallel to Galena Creek for approximately 100 feet before either re-infiltrating or entering Queen of the Hills Creek just upstream of its confluence with Galena Creek.

Edwards Mine: The Edwards mine complex consists of two discrete waste rock piles presently located in a small watershed that is a western tributary to Galena Creek. Previous investigation of the estimated volume of the waste rocks piles is 50,000 cubic yards. There is also at least one open adit located on the Edwards mine complex, but there is no evidence that it discharges. Previous reports reference a second collapsed adit feature, but this has not been observed in the field by Doe Run. The Edwards waste rock piles are generally located upslope from the Barker (Block P) mine dump. It is our understanding that the workings of the Barker, Edwards, and Wright mines are interconnected underground.

Wright Mine: The Wright mine complex consists of at least four discrete waste rock piles presently located on the slopes above the Edwards mine just below the crest of the ridgeline that C. Documents and Settings Sway My Documents Barker-Hughesville EECA Info Block P Mine - Dft SOW1.doc.

forms the western boundary of the Galena Creek valley. The total volume of these waste rocks piles has been previously estimated to be approximately 20,000 cubic yards. It is assumed that each of these four piles is associated with a collapsed adit feature discharges.

Belt Patent Mine: The Belt Patent mine is located along the east bank of Galena Creek just downstream of the Barker (Block P) mine dump. There is a pile of unvegetated materials resembling weathered waste rock located in the floodplain of Galena Creek. Previous investigations state that this property includes 750 cubic yards of tailings-like materials, 65 cubic yards of waste rock, and a collapsed adit.

#### V. Work to Be Performed

#### A. Pre-Investigation Planning Documents (Task 1)

The Respondent shall prepare and submit to EPA for review and approval the following documents:

- Work Plan
- Sampling and Analysis Plan
- Quality Assurance Project Plan
- Project Health and Safety Plan

The Work Plan shall describe the technical and coordination activities to be followed in completing the EE/CA. The Work Plan shall include proposed removal objectives, detailed potential removal action alternatives, and draft ARARs. The list of potential removal action alternatives to be examined is anticipated to include a range from no action, various onsite actions and it may include an off-site disposal alternative for the mine waste. Acid mine drainage controls associated with adit discharges that will be evaluated under this EE/CA include surface flow diversions, underground grouting, bulkhead installation, backfilling and piping options.

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In order to develop a detailed work plan, the Respondent shall evaluate and summarize existing data in the Work Plan to identify existing data gaps and propose appropriate investigations to characterize mine waste and discharges. The characterization efforts must include determining the number of and quantity estimates, based on accepted engineering practices, for waste piles and mine discharges. This must include flow measurements over different seasons for the mine discharges and stream flows over different season. Also, mine discharges, ground water and surface water must be characterized chemically for hazardous substances and other parameters necessary for evaluating the sources of flow and contaminant loading. These sampling and analysis methods must be identified in the SAP. Subsurface characterization of waste and ground water may require drilling operations, which must be described in the work plan.

In addition, historical mine mapping must be identified and used for preliminary evaluation of underground workings that may require investigation on site. This information will be used to gain an understanding of the possible areas to investigate mine discharges for flow control measures and contaminant loading. A preliminary plan for on site reconnaissance of the workings shall be presented in the Work Plan. Conceptual plans for managing pooled water behind underground blockages shall also be addressed in the Work Plan.

Locations that may be suitable for developing a mine waste repository onsite shall be identified prior to the field investigation activities. These potential storage sites shall be further evaluated during the field investigations based on accepted screening criteria outlined in the Work Plan. Investigative efforts shall include, but not necessarily limited to, researching existing geological and hydrogeological information, include onsite reconnaissance to locate and map surface drainages, springs and wetland conditions, and geologic assessment of site stability. In addition, as appropriate, sampling surface and subsurface soil and water may be performed. The information will be used to determine the feasibility of relocating major mine waste sources within the site to a common location for long-term/permanent storage in an engineered repository.

The Sampling and Analysis Plan (SAP) shall be prepared to describe specific methods that will be used to address identified data gaps. The SAP will delineate:

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- The environmental media to be tested (e.g., groundwater, soil).
- Specific testing locations within these media (including a map).
- Data collection methods and analyte suites for each environmental media to be tested.
  - Analytical methods and associated detection limits.
  - Quality assurance/quality control measures.

The SAP shall also include a summary of the field work-conducted at the site since 1996 but prior to the AOC. In addition, the SAP may also include descriptions of possible geotechnical sampling and testing activities to support subsequently developed removal designs. The SAP shall be prepared consistent with the guidance documents referenced in the Administrative Order on Consent. Respondent is responsible for fulfilling any additional data needs identified by the Respondent EPA consistent with the general scope and objectives of this EE/CA and the AOC.

The Quality Assurance Project Plan (QAPP) will describe the quality assurance procedures, quality control specifications, and other technical activities that will be implemented to ensure that the results of primary data collection, secondary data usage, and data processing activities meet project specifications.

A site-specific project health and safety plan was prepared for field investigation and site reconnaissance activities conducted as part of the Block P Mill Site EE/CA project. The health and safety protocols contained in this existing health and safety plan will be reviewed, and revised as necessary, for applicability to the Block P Mine complex work as described in this SOW. The revised Health and Safety plan will be submitted to EPA.

## B. Field Investigations (Task 2)

The approved field investigations identified in the Work Plan and SAP shall be implemented by the Respondent in support of the EE/CA and associated removal alternatives analysis. It is anticipated that this work will be initiated in the spring of 2008 as conditions on the ground allow for access to the Site. As necessary, more detailed plans for specific activities may be required during the implementation of the work.

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#### C. EE/CA Report (Task 3)

The Respondent shall prepare and submit to EPA for review and approval an EE/CA which follows the outline and content described in the publication, *Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA* (EPA540-R-93-057, August 1993). The principal subjects to be included are: Site Characterization, Identification of Removal Action Objectives, Identification and Analysis of Removal Action Alternatives, Comparative Analysis of Removal Action Alternatives, and Recommended Removal Action.

#### VI. Coordination and Reporting

Respondent shall submit a schedule for field work planned during each season and provide updates as needed to ensure that EPA and the State have adequate opportunity to be present and oversee field investigation activities. Written progress reports will be provided to EPA and the State concerning activities undertaken pursuant to this Consent Order every thirty (30) days, commencing thirty-five (35) days from the effective date of the Consent Order, and continuing until the Consent Order is terminated or unless otherwise directed by EPA. These reports shall describe all significant developments during the preceding period including work performed and problems encountered and resolutions in completing this work; the developments anticipated and the work scheduled during the next reporting period. Also, these monthly reports will provide the data obtained from field investigations and sampling analysis reports.

#### VII. Schedule

The Respondent shall comply with the following schedule for completion of work, as further provided in the AOC:

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Work Task	Deadline
Submit Draft Work Plan to EPA (Task 1)	Within 60 days following execution of AOC.
Submit Draft Sampling and Analysis Plan (Task 1)	Within 60 days following execution of AOC.
Submit Draft Health and Safety Plan (Task 1)	Within 60 days following execution of AOC.
Conduct Field Investigations and Reporting (Task 2)	Beginning Spring 08 following Plan Approvals
Submit Draft EE/CA (Task 3)	Within 90 days following completion of Field Investigations
Submit Final EE/CA (Task 3)	Within 30 days following receipt of EPA comments on the Draft EE/CA.

All deliverables shall be submitted initially in draft form, in accordance with the schedule above, and are subject to review, comment, and written approval by EPA. With the exception of submittal of the final EE/CA, Doe Run shall amend and submit a revised deliverable to EPA within 30 days of receipt of EPA comments on each draft deliverable.

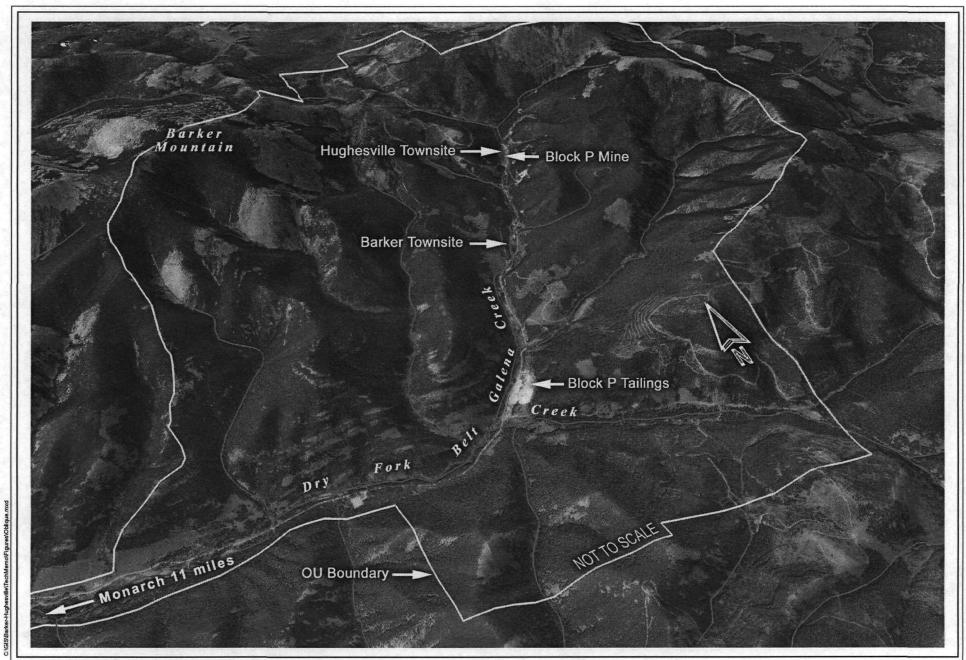


Figure 1.1-2 Oblique View, Barker-Hughesville Mining District Site Investigation Summary Report - January 2005 Barker-Hughesville Mining District NPL Site

